INFORMATION TECHNOLOGY SUPPORT SERVICE

Level II

Learning Guide # 26

Unit of Competence:-	Administer Network Hardware and Peripheral
Module Title:-	Administering Network Hardware and Peripheral
LG Code:-	ICT ITS1 M06 LO9
TTLM Code:-	ICT ITS1 TTLM06 1019

LO9. Support input and output devices

Instruction sheet	Support input and output devices

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics –

- Setting up and checking functionality of Input and output devices
- Installing drivers and checking functionality
- Ensuring Drivers are working properly

This guide will also assist you to attain the learning outcome stated in the cover page.
Specifically, upon completion of this Learning Guide, you will be able to –

- Input and output devices are set up and checked functionality based on requirement.
- Drivers are installed as appropriate and checked functionality based vendor manuals.
- Drivers are ensured to be properly working

Learning instruction:

1. Read the specific objectives of this Learning Guide.
2. Follow the instruction describe below 1
3. Read the information written in the information "sheet 1 ", "in page 3.4.5 and 6 " respectively
4. Accomplish the "self-check 1" "in page 7"
   Respectively
5. If you earned a satisfactory evaluation from the "self-check" proceed to "operation sheet 1, sheet 2 . Sheet 3" "in page 9.10.11.12.and 13"
6. Do the" LAB "Test in page "16"

*Your teacher will evaluate your output either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory you can proceed to the next topic.

Information Sheet – 1	Setting up and checking functionality of Input and output devices

9.1 **Setting up and checking functionality of Input and output devices**

Input devices only allow for input of data to a computer and output devices only receive the output of data from another device. Most devices are only input devices or output devices, as they can only accept data input from a user or output data generated by a compute

Input and output devices that provide computers with additional functionality are also called peripheral or auxiliary devices. 10 **Examples** of **Output Devices**. Monitor. ...

- Monitor
- Printer
- Computer Speakers
- Headphones
- Projector
- GPS
- Sound Card

What is the difference between an input and output device

An input device sends information to a computer system for processing, and an output device reproduces or displays the results of that processing. Input devices *only* allow for input of data to a computer and output devices *only* receive the output of data from another device.

Most devices are only input devices or output devices, as they can only accept data input from a user or output data generated by a computer. However, some devices can accept input and display output, and they are referred to as I/O devices (input/output devices).

For example, as you can see in the top half of the image to the right, a keyboard sends electrical signals, which are received by the computer as **input**. Those signals are then interpreted by the computer and displayed, or **output**, on the monitor as text or images. In the lower half of the image,

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Date: **October 2019**
Author: **Federal TVET Agency**
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the computer sends, or **outputs**, data to a printer, which will print the data onto a piece of paper, also considered **output**?

Input devices

An **input** device can send data to another device, but it cannot receive data from another device. Examples of input devices include the following.

- **Keyboard** and **Mouse** - Accepts input from a user and sends that data (input) to the computer. They cannot accept or reproduce information (output) from the computer.
- **Microphone** - Receives sound generated by an input source, and sends that sound to a computer.
- **Webcam** - Receives images generated by whatever it is pointed at (input) and sends those images to a computer.

How to check an installed driver version

1. Click Start, then right-click My Computer (or Computer) and click Manage.
2. In the Computer Management window, on the left, click Device Manager.
3. Click the + sign in front of the device category you want to check.
4. Double-click the device for which you need to know the driver version.
5. Select the Driver tab.

A **driver**, or device **driver**, **is** a software program that enables a specific hardware device to work with a computer's operating system. For some devices, such as printers, the operating system may automatically find and **install** the correct **drivers** when the device **is** connected.

How a driver is saved and packaged determines how it is installed. Below is information about each of the methods developers use to distribute their drivers, as well as how to install them in Microsoft Windows. Additionally, there are some general insights to help prevent frustrations during the process.

How to check an installed driver version

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5. Select the Driver tab.

9.3 **Ensuring Drivers are working properly**

How do I check if my driver is working properly?

Left-click the device to select it. Right-click the device then select   Properties. Take a look at the Device status windows. **If** the message is "This device is **working properly**", the **driver** is installed **correctly** as far as Windows is concerned.

Drivers are supporting instructional software that helps computer hardware components work properly. When you install operating system updates, you may assume that all device drivers are updated as well. But driver updates are only installed when they are necessary for the OS to function properly. If your existing drivers are compatible with the newest system update, no changes are made. You can manually install updates if the current drivers are incompatible with newer technology, like a new media player or video game.

Perform a Windows Update

Before updating individual device drivers, do a system update. This ensures that your devices will still work right after patches and service packs are applied. Make sure that you are not trying to run an old service pack with a new device driver. If you don't have system updates set to install automatically, open the Windows menu and select "Windows Update." You can also perform an update from the Control Panel, System and Maintenance menu.

Determine if a Driver Update is Necessary

Just because a newer version of a driver exists, that does not mean that you have to update it. Your computer's performance will determine the need for an update. For example, if you can't install a new application, or if a graphics tool does not work properly, it could be an indication that a device driver needs updating.

Check for Updates at the Manufacturer's Website

If you think that your graphics card or media or audio player needs an updated driver, visit the website of the manufacturer and go to their support page. NVidia, for example, has a "Download Drivers" page that gives you the option to either select your exact device or allow them to detect the device for you, before providing update options.

Self Check 1	Written Test

Name: _____   Date: _____

Direction: **filling** the appropriate answer for the following question in the specie provided, if you have some clarifications- feel free to ask your teacher.

1. _____ is only allowing for input of data to a computer.
2. _____ only receive the output of data from another device.
3. _____ is a software program that enables a specific hardware device to work with a computer's operating system.
4. Operating systems may _____ and install the correct drivers when the device is connected.
5. _____ are supporting instructional software that helps computer hardware components work properly.
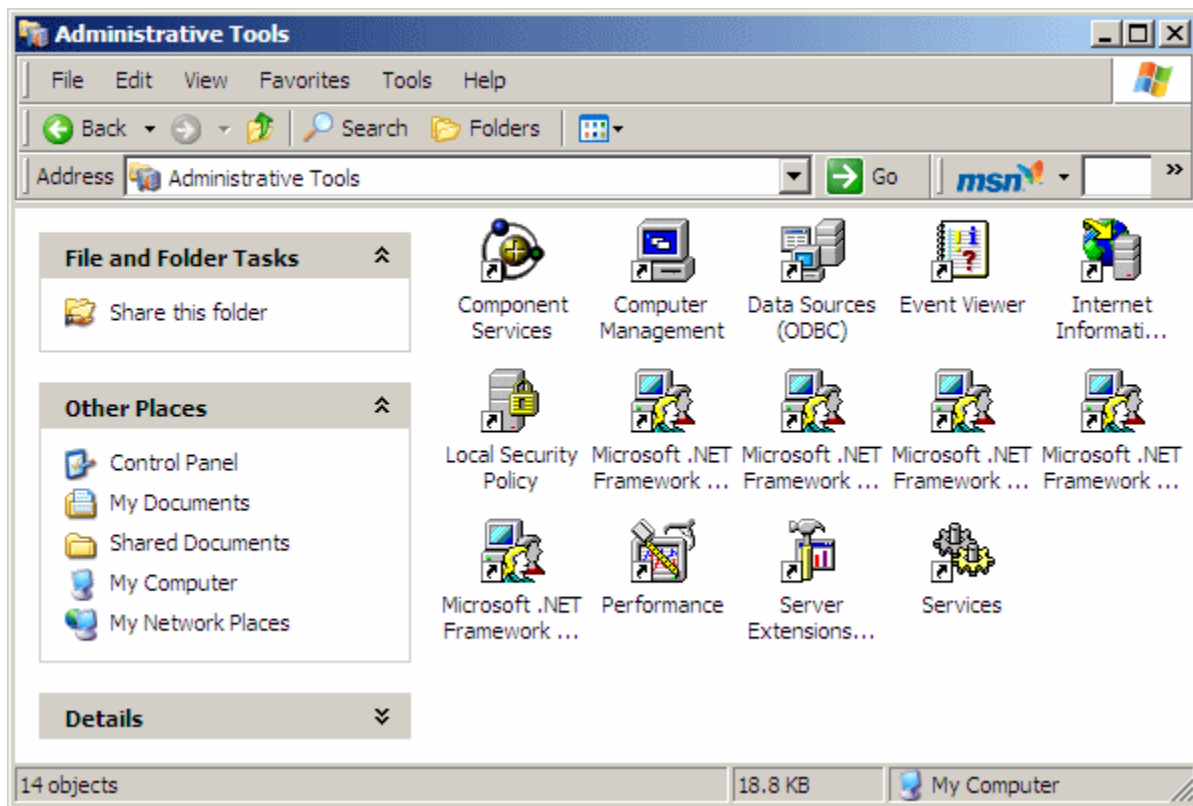
Note: **Satisfactory rating - 3 points   Unsatisfactory - below 3 points.**

Operation Sheet – 1	Setting up and checking functionality of Input and output devices

Steps of how to checking input and output device are properly connected in computer

Most of the tools used to locally manage a Microsoft Windows XP Professional or a peer-to-peer network are listed in the Administrative Tools window. To open it, you can open Control Panel and double-click Administrative Tools:
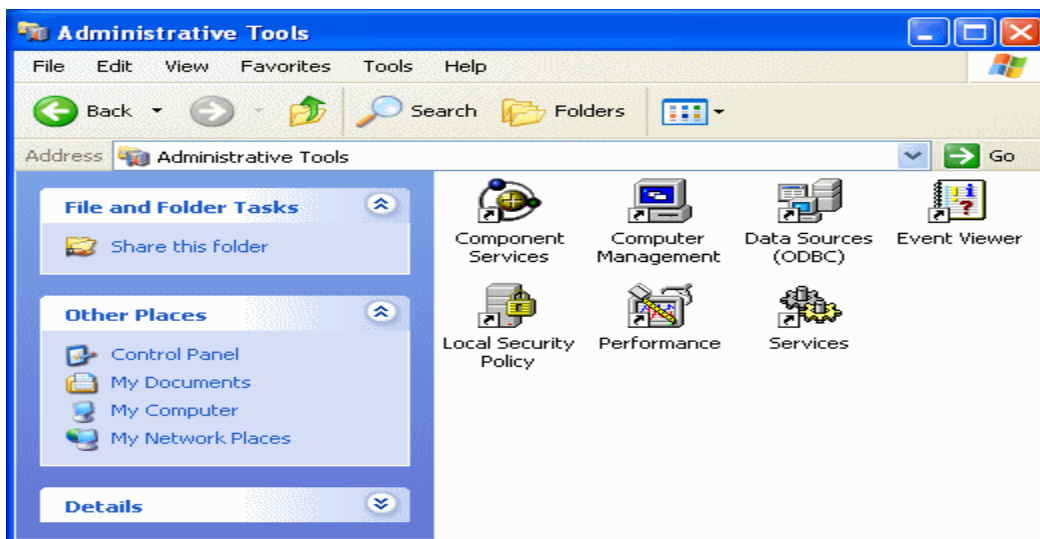

As you install more software or libraries to your computer, the tools may increase in sophistication and number. Here is an example:
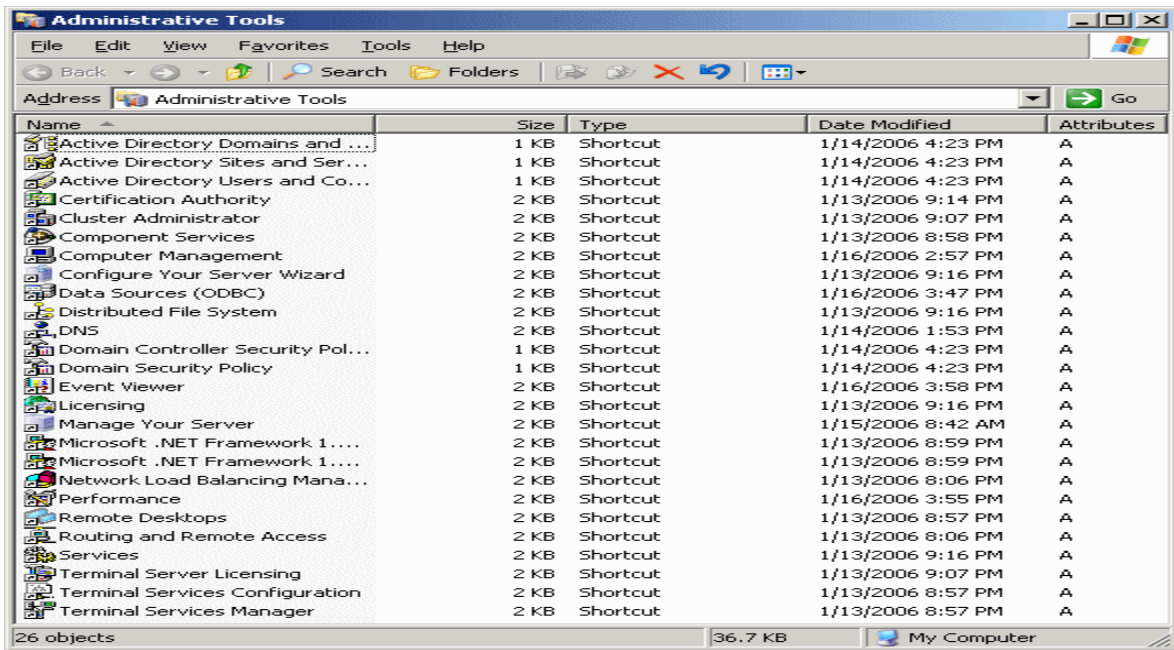
To use a tool, you can double-click it.

Operation Sheet – 2	**Network Management with Windows Server 2003**

Like Microsoft Windows XP Professional, Windows Server 2003 groups its administration routines under an ensemble referred to as Administrative Tools. Unlike the former, the later provides various ways of accessing the tools.

After you have just setup Microsoft Windows Server 2003 and installed Active Directory, the first window that comes up provides some of the most regular tools you will need to administer the network:
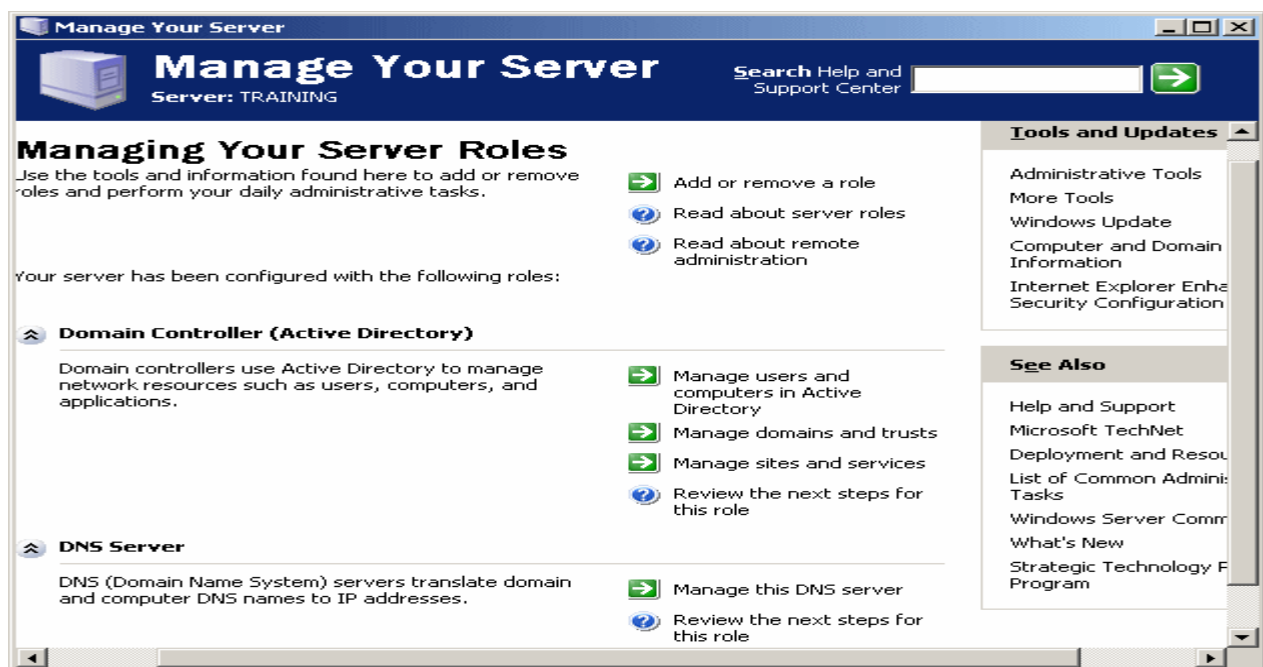

The middle section of this window provides only a limited list of tools, considered to be the most regularly used. Alternatively, you can display the whole list of tools in a window. To do this, under the Tools and Updates Section, you can click Administrative Tools:

To use a tool, you can double-click it.

Another technique you can access the tools consists of clicking Start -> Administrative Tools:
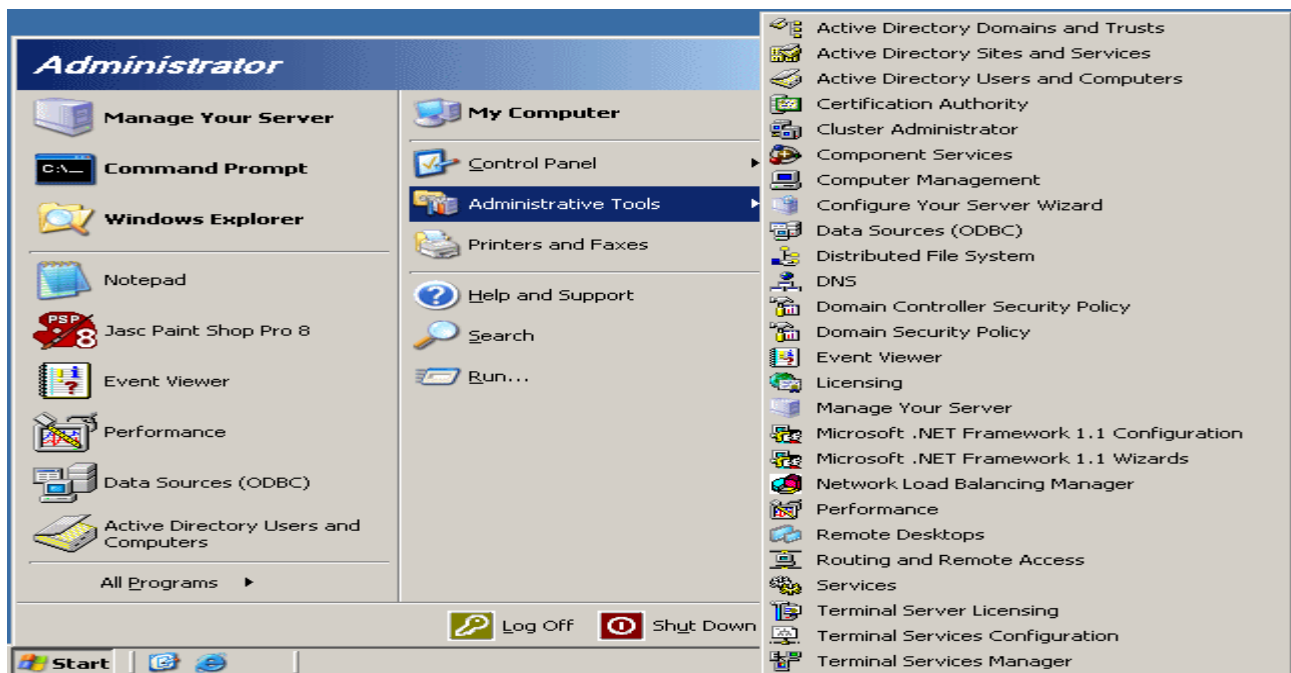
Another technique consists of click Start -> All Programs -> Administrative Tools

You can also click Start -> Control Panel -> **Administrative Tools**.

With any of these previous techniques, to use a tool, simply click it from the menu.

Operation Sheet – 3	The Microsoft Management Console

Introduction If you have some experience with Windows Explorer of Microsoft Windows 9X and later, you may be aware that, in that same window, you can open your folders, view your files, open Control Panel, or even view a web page. In the same way, to make computer and network management easy, Microsoft Windows XP and Windows Server 2003 provide a common window named Microsoft Management Console or MMC. This makes it possible for all routine operations to be performed in a window that primary looks the same regardless of the task being performed. You can perform all routines operations without formally being aware that you are using the MMC.

Practical Learning: Introducing the MMC

1. To view examples of administrative applications that share an interface:

    o If you are using Microsoft Windows XP Professional, click open Control Panel, double-click Administrative Tools, and double-click Computer Management
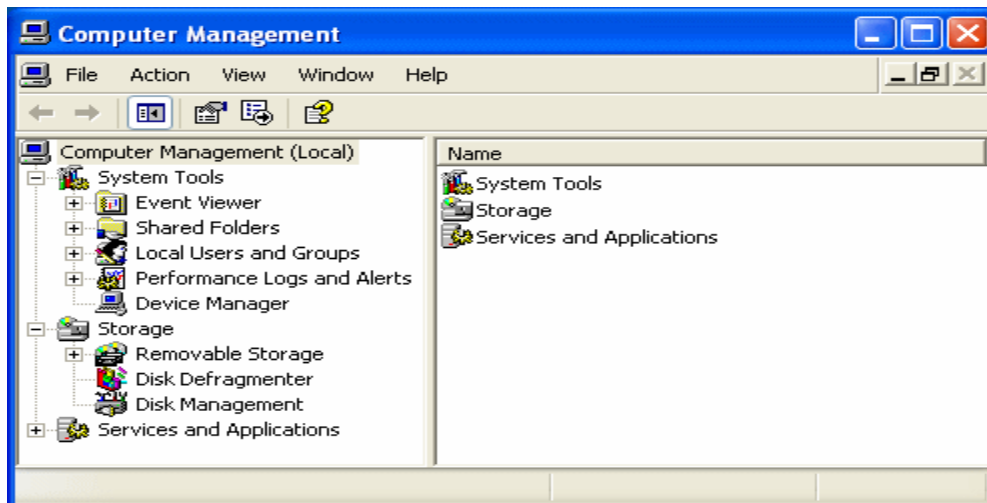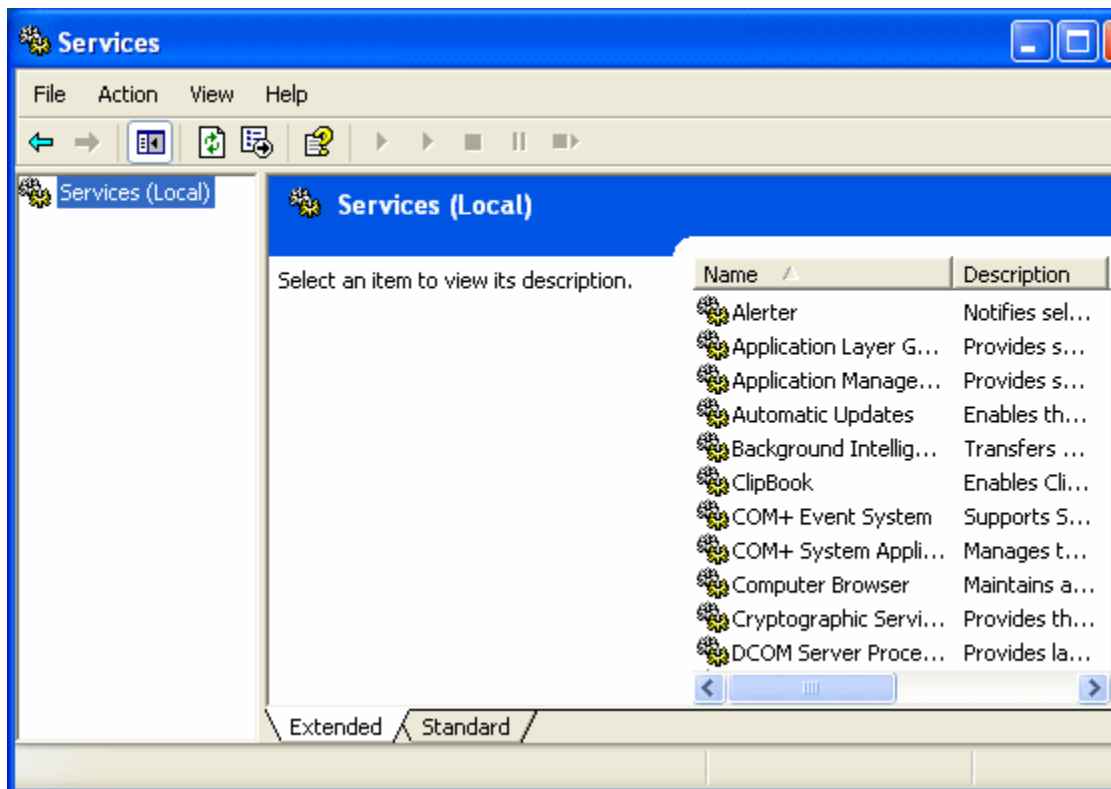

    o If you are using Microsoft Windows Server 2003, click Start -> Administrative tools -> Active Directory Users and Computers
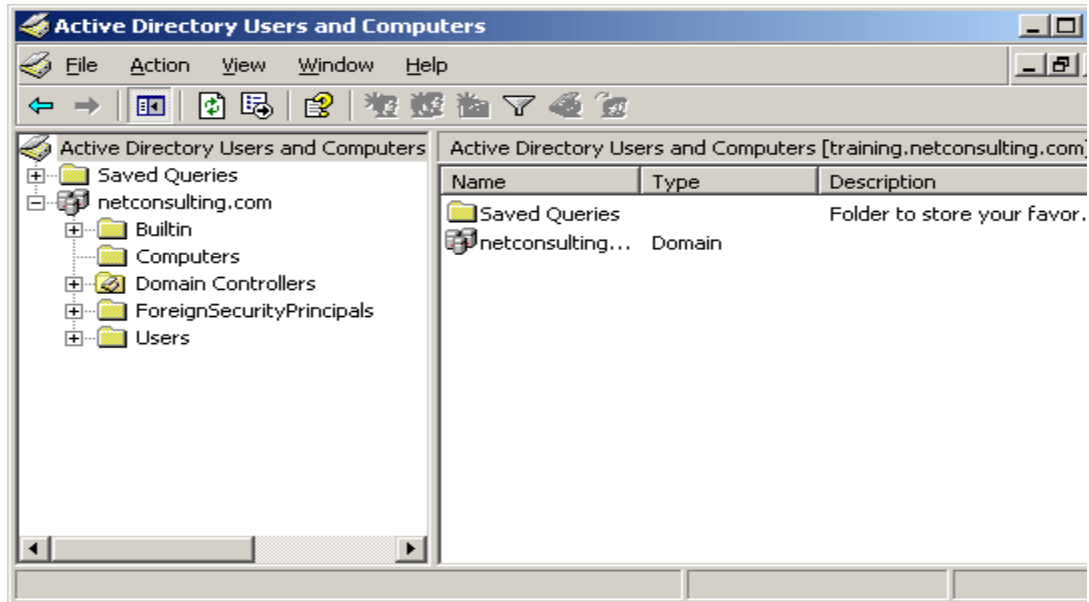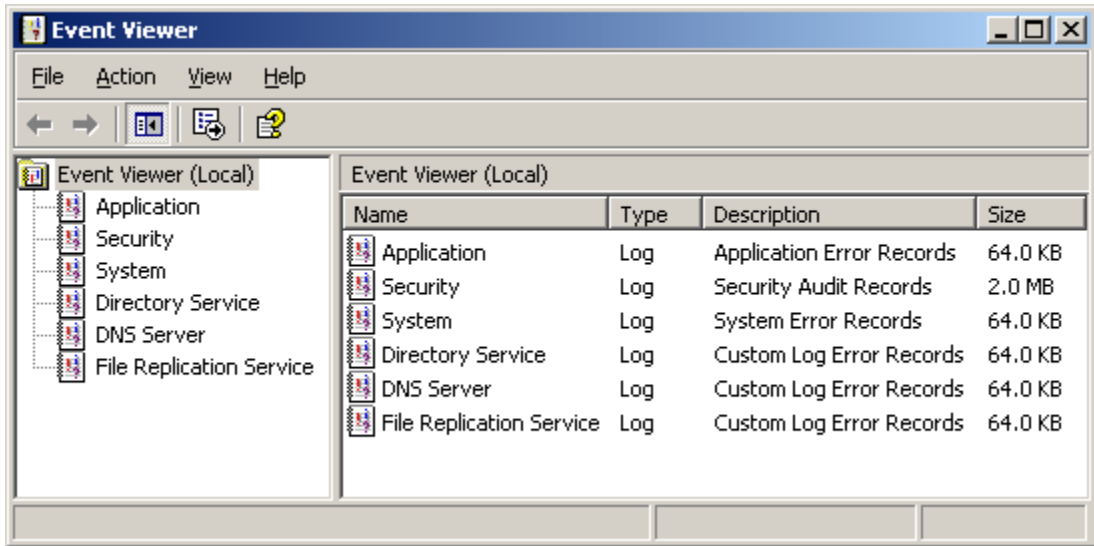
2. To one more administrative window:

    o   If you are using Microsoft Windows XP Professional, in the Administrative Tools window, double-click Services

    o   If you are using Microsoft Windows Server 2003, click Start -> All Programs -> Administrative tools -> Event Viewer

3. Close the windows

Lap Test	**Practical Demonstration**

Name: _____ Date: _____
Time started: _____ Time finished: _____

Instructions: You are required to perform the following individually with the presence of your teacher.

> ➢ *Your teacher will evaluate your output either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advice you on additional work. But if satisfactory, you can proceed to the next topic.*

1. How to determine the functionality of input and output device?

2. How to configured network management in window 2003 server?

3. How to work the management console in window 2003 server?

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List of reference material

1. Book

   - Beginners-intro-email-part1.

   - Computer Hardware_ Hardware Components and Internal PC Connection.

   - Computer Networking & Hardware Concepts.

   - Computer-Networks--Introduction_Computer_Networking(1)

   - Internet-Access-Education_2017120

   - Principles_of_Network_and_System_Administration_(2ed)

2. Web adders links

   - www.wikipidia.com

   - www.google.com

   - web1.keira-h.school.nsw.edu.au/faculties/IT/